The details of my work are given in a forthcoming *Lick Observatory Bulletin.* The elements now computed are as follows:—

True Orbit.

$P =$ 44.5 years
$T =$ 1905.4
$e =$ 0.767
$a =$ 0″.701
$\omega =$ 352°.6
$\Omega =$ 20 .4
$i = \pm$29 .1

Apparent Orbit.

Length of major axis 1″.464
Length of minor axis 0 .802
Dist. of star from center 0 .561
Angle of major axis 11°.0
Angle of perihelion 13 .5
Position angles increasing.

These results are considered as approximate only. The apparent motion of the companion will be so rapid during the next few years that data will soon be available for a more complete discussion of the theory of the system than seems advisable at present.

R. G. AITKEN.

May 29, 1905.

NEW COMPANIONS TO THREE STRUVE DOUBLE STARS.

In the course of my systematic search for new double stars I have recently found additional close companions to the well-known pairs, Σ 419, Σ 1000, and Σ 1823. The mean results of my measures of the new and old companions are as follows:—

Σ 419.

1905.13	347°.4	0″.44	7.4 — 9.8	2ⁿ	B and C. New.
1905.13	73°.6	3″.08	7.2 — 7.3	2	A and B = Σ 419.

Σ 1000.

1904.95	313°.8	0″.27	8.2 — 8.5	2ⁿ	A and B. New.
1904.94	66 .8	22 .29	8.0 — 9.0	1	AB and C = Σ 1000.

Σ 1823.

1905.34	239°.2	0″.21	9.0 — 9.5	2ⁿ	A and B. New.
1905.34	149 .6	3 .49	8.7 — 9.7	2	AB and C = Σ 1823.

My measures of Σ 419 and Σ 1000 give practically the same results as those obtained by STRUVE seventy-five years earlier. STRUVE's measure of Σ 1823 is:—

1830.0 156°.1 3″.35 8.5 — 9.5.

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May 23, 1905.